

840575

COMPILATION REPORT  
GEOLOGY AND GEOCHEMISTRY  
SHAM ROCK CLAIMS

TATSAMENIE LAKE AREA, B.C.  
ATLIN MINING DIVISION

Latitude 58°17'N

Longitude 132°10'W

N.T.S 104K/IE

OWNER: CHEVRON MINERALS LTD.

AUTHOR: GODFREY WALTON

April 1985

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## LOCATION AND ACCESS

The SHAM ROCK claims (Fig. 1) are located at latitude 58°17'N and longitude 132°10'W, 15 kilometers southeast of Tatsamenie Lake, in Northwestern British Columbia. These claim blocks are located in the southeastern corner of the Tulsequah mapsheet (104K).

Access to the claims has to date been by helicopter from a base camp at Trapper Lake in 1983. Provisions were flown into the base camps either from Atlin 140 kilometers to the north or from Dease Lake 150 kilometers to the east. Float equipped fixed wing aircraft are available in either location for charter.

## CLAIM STATUS

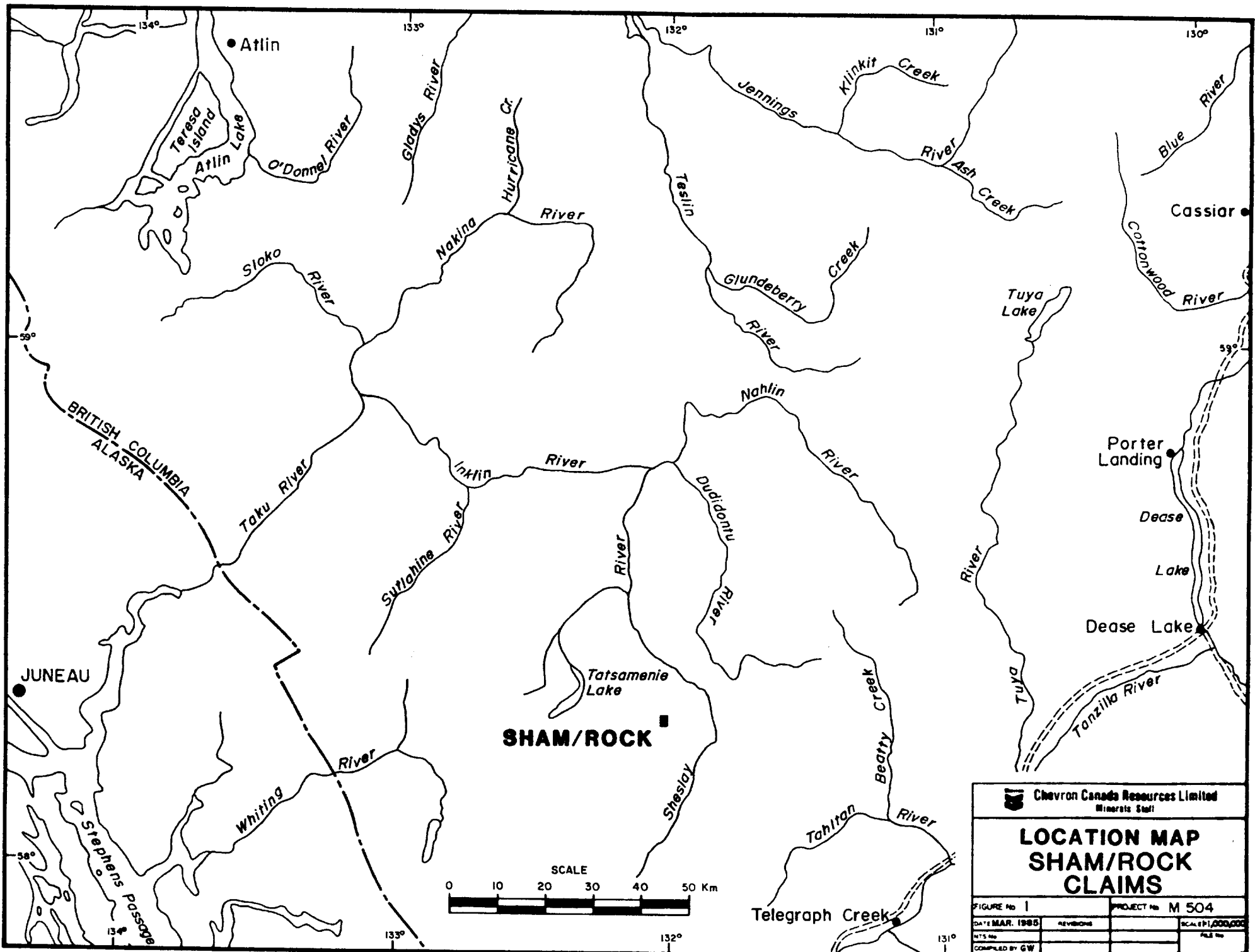
The claims which comprise the SHAM ROCK claim block are listed below with the pertinent information.

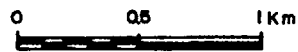
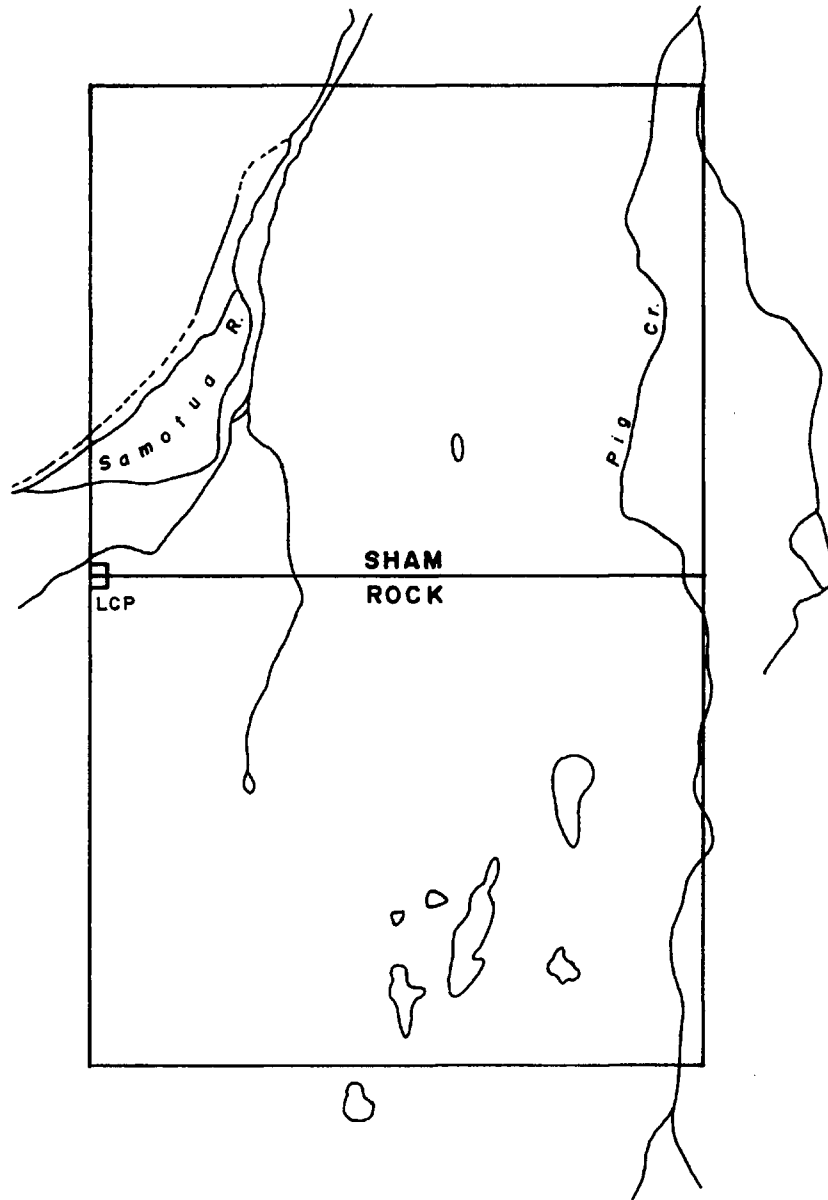
<u>Claim Name</u>	<u>Record No.</u>	<u>Record Date</u>	<u>Expiry Date Applied For</u>	<u>No. of Units</u>
SHAM	1969	July 4, 1983	July 4, 1986	20
ROCK	1966	July 4, 1983	July 4, 1986	20


The claims configuration is outlined on Figure 2. The SHAM ROCK claims cover an area of 2,471.2 acres.

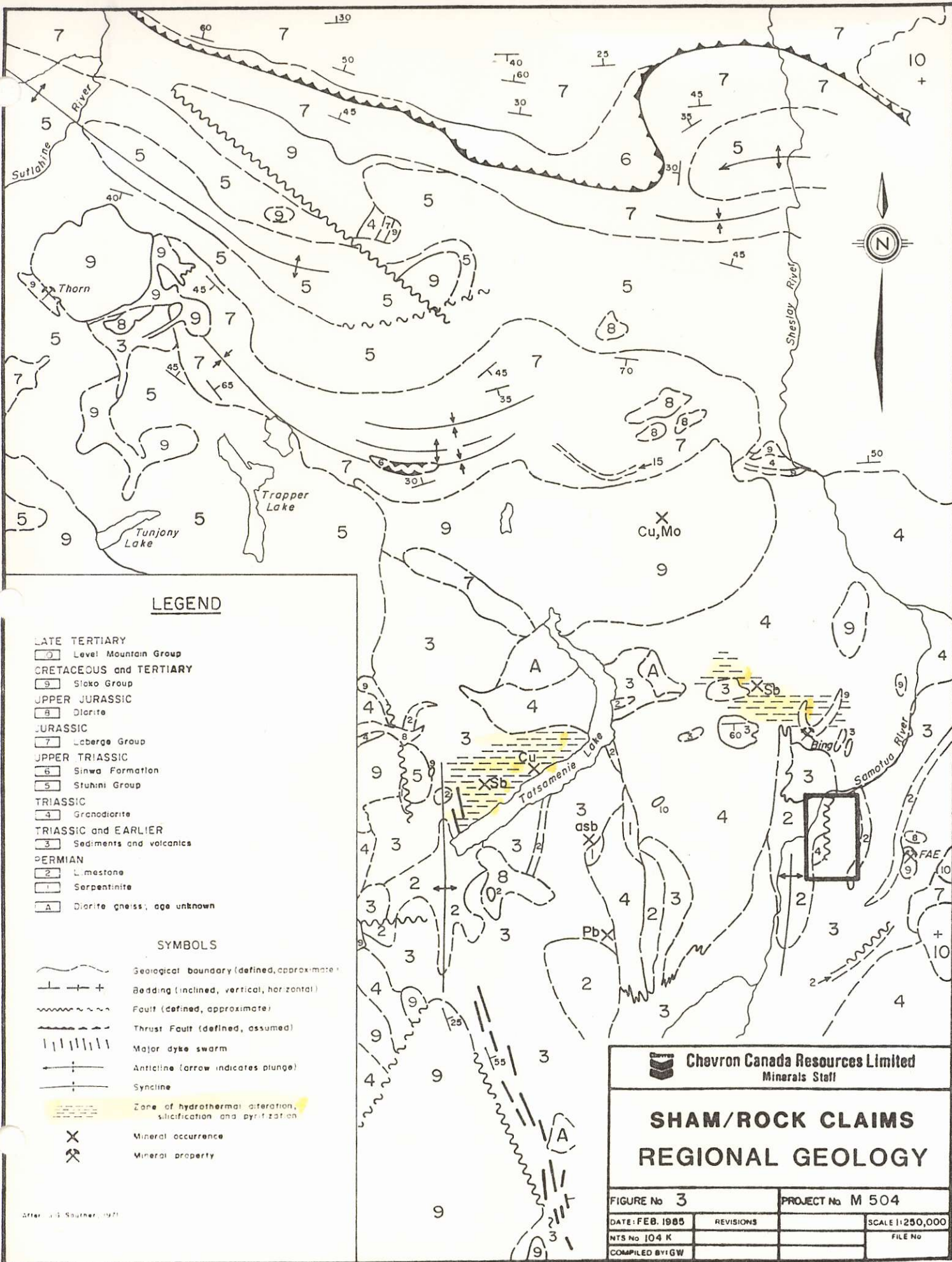
## GENERAL GEOLOGY

The area covered by the SHAM ROCK claim block is part of Souther's (1971) geological map of the Tulsequah mapsheet. A reproduction of the Souther's 1971 geology around the SHAM ROCK area is shown on Figure 3. The main units displayed on this figure are:





 <b>Chevron Canada Resources Limited</b> Minerals Staff			
<b>SHAM &amp; ROCK</b> <b>CLAIM MAP</b>			
<b>FIGURE No 2</b>		<b>PROJECT No M-504</b>	
<b>DATE MAR. 1988</b>	<b>REVISIONS</b>	<b>SCALE 1:31,250</b>	
<b>PTS No 106 K</b>		<b>FILE No</b>	
<b>COMPILED BY S.W.</b>			



**LEGEND**

- LATE TERTIARY
  - 0 Level Mountain Group
- CRETACEOUS and TERTIARY
  - 9 Sloko Group
- UPPER JURASSIC
  - 8 Diorite
- JURASSIC
  - 7 Loberge Group
- UPPER TRIASSIC
  - 6 Sinwa Formation
  - 5 Stuhini Group
- TRIASSIC
  - 4 Granodiorite
- TRIASSIC and EARLIER
  - 3 Sediments and volcanics
- PERMIAN
  - 2 Limestone
  - 1 Serpentinite
  - A Diorite gneiss; age unknown

**SYMBOLS**

- Geological boundary (defined, approximate)
- Bedding (inclined, vertical, horizontal)
- Fault (defined, approximate)
- Thrust Fault (defined, assumed)
- Major dyke swarm
- Anticline (arrow indicates plunge)
- Syncline
- Zone of hydrothermal alteration, silicification and pyritization
- Mineral occurrence
- Mineral property

**Chevron Canada Resources Limited**  
Minerals Staff

**SHAM/ROCK CLAIMS**  
**REGIONAL GEOLOGY**

FIGURE No 3		PROJECT No M 504	
DATE: FEB. 1985	REVISIONS	SCALE 1:250,000	
NTS No 104 K		FILE No	
COMPILED BY: GW			

After J.S. Southern, 1977

Cretaceous-Tertiary:	Sloko Group, rhyolite, felsic intrusion.
Jurassic:	Diorite
Triassic:	Granodiorite-foliated
Pre-Upper Triassic unit:	Greenstone, limestone, phyllite (Stikine Terrane)

The main unit in the area is the Pre-Upper Triassic assemblage which consists of greenstones, phyllites and limestones. This is the largest aerial extent of Pre-Upper Triassic assemblage on the Tulsequah mapsheet. The Pre-Upper Triassic assemblage is the basement unit in the area and is known as the Stikine Terrane. This terrane is allochthonous and was accreted to the North American craton in early Triassic time (Souther, Coney et al). After that time Triassic to Jurassic sedimentary, volcanic and volcanoclastic rocks were deposited on the Stikine Terrane. All of these rocks have been intruded by four distinct igneous events; one in the Triassic, one in the Jurassic, one in the Cretaceous Tertiary and finally one in the Pleistocene period .

In the SHAM ROCK area there are no units overlying the Stikine Terrane, however, the assemblage has been intruded by three igneous events. The oldest is a Triassic granodiorite to diorite. This rock is easily identified in the field because it is well foliated unlike the other intrusive events. The next intrusive event is the Jurassic diorite which is unfoliated, massive equigranular and coarse grained. These two intrusive rock types are quite easily distinguished.

The third igneous event is the Cretaceous to Tertiary Sloko group consisting of a series of felsic volcanoclastic and intrusive rocks. There is no indication of any definite volcanic centre in the area.



The main structure visible in the Landsat images is the northeasterly trending curvilinear structure that is south of the claims. This structure continues for 30 kilometers before intersecting a major northwest striking structure. On the west side of the claim there is a north-south lineament which contains the Samotua River.

The large alteration zone on the northwestern side of Tatsamenie Lake has been staked on several occasions and has been heavily prospected for a number of years especially during the height of the porphyry copper exploration. There are a number of copper showings in the general area; two have been classified as porphyry copper. One is just east of the big bend in Tatsamenie Lake and the other is just east of the SHAM ROCK claims. Both are fairly small. Some drilling was carried out in the early seventies on the southeastern shore of Tatsamenie Lake which is supposed to have intersected some porphyry style copper mineralization.

### LOCAL GEOLOGY

A geological map of the SHAM ROCK claims is shown on Figure 4. This map was made in 1983 on an airphotographic enlargement at a scale of 1:10,000.

The geological units shown on the map are:

Diorite

Pre-Upper Triassic, greenstone and phyllite

The diorite is foliated, medium grained and has a gray colour on the weathered surface. Some of the hornblende crystals are weakly altered to epidote and chlorite. The foliation in the rock suggests the rock is probably Triassic in age.



The majority of the claim blocks are underlain by the Pre-Upper Triassic assemblage. This unit can be subdivided into three subunits. A basal limestone which is overlain by phyllites which in turn are overlain by a tuffaceous package. This stratigraphy has been established elsewhere in the district.

The limestone is a grey, varying carbonaceous, locally thinly bedded and has chert nodules. This unit is an important host rock for gold mineralization in the district.

Overlying this limestone is a phyllite package which varies considerably in thickness.

The phyllite package contains a number of thinly bedded units which are quite distinct marker beds; they do not occur on this claim block. The phyllites are fairly uniform with some colour difference which may represent alteration as opposed to lithological layering.

The phyllite is overlain, probably unconformably, by a package of volcanic and volcanoclastic rocks as seen elsewhere in the district. The tuffaceous portion of the package is andesitic to basaltic in composition. The tuffs vary from fine grained thinly bedded tuffs to lapilli tuffs and rarer tuff breccias. No evidence occurs on the SHAM ROCK claims to support the suggestion of an unconformity between the phyllites and the greenstone but this is based on Chevron mapping elsewhere in these rocks.

On the ROCK claim the greenstones have been intensely altered to quartz-carbonate, and pyritized and have the characteristic orange weathered colour. The alteration is extremely intense but localized on the ROCK claim. One locality of silicification in the phyllite was found but samples from the outcrop had values of 5 ppb Au.

The major structure on the claim blocks is a north-south fault which separates the fresh limestone to the west from the greenstone, diorite to the east. No other structures are evident on the claims, however outcrop is not prevalent.

### **MINERALIZATION**

No mineralization has been located on the SHAM ROCK claims. Two zones of alteration were found but samples from both of these zones produced values of 5 ppb Au.

### **WORK TO DATE**

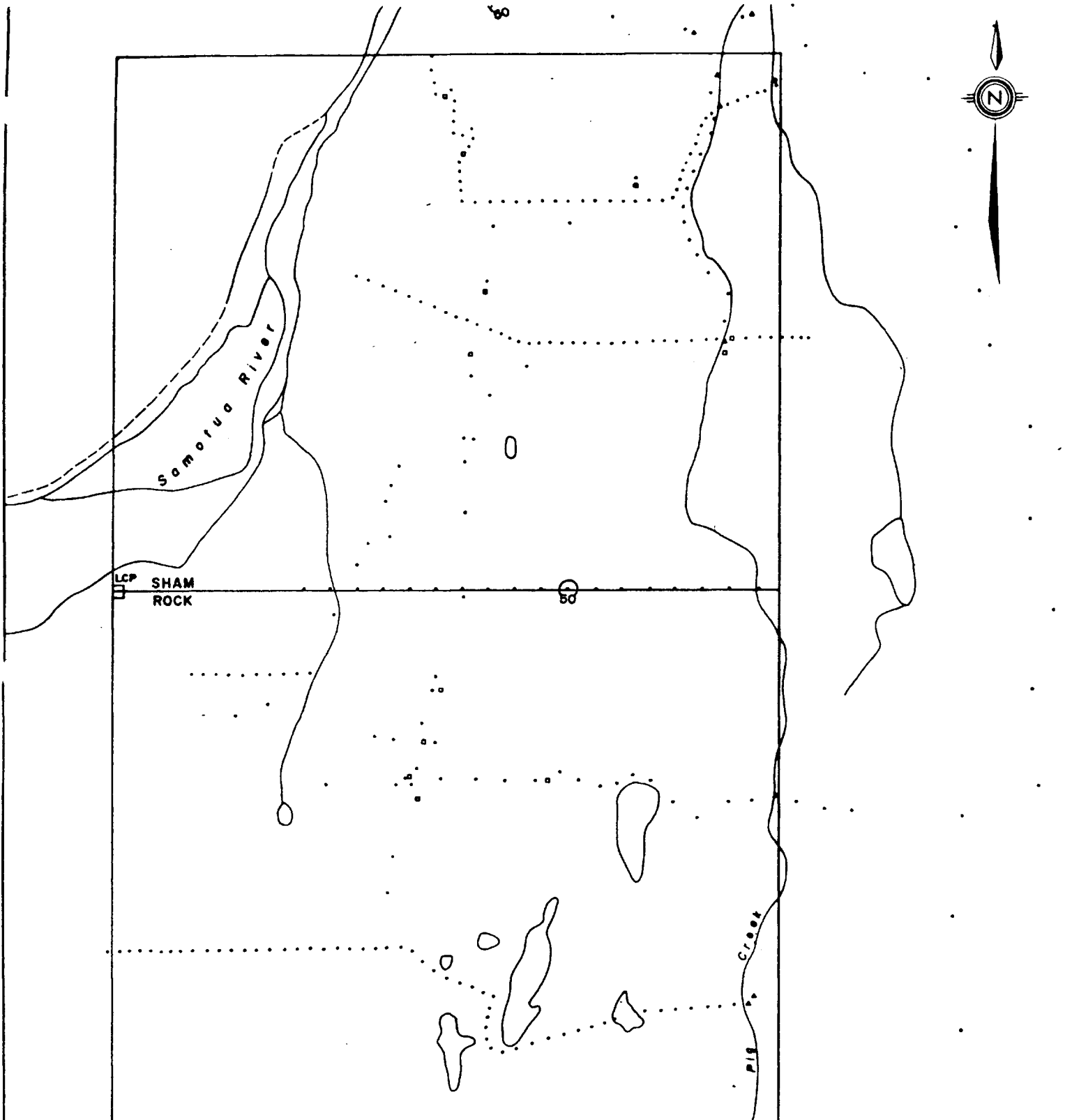
Work to date consisted of geological mapping and prospecting and geochemical surveys of soils, silts and rocks.

### **Geological Survey**

The geology is shown on Figure 4. The data was collected by making traverses throughout the property and recording location on an enlargement of an airphotograph. The airphotographs were enlarged to a scale of 1:10,000 from the provincial 1:30,000 scale airphotograph. The daily traverse sheets along with the field notes are kept as a permanent record.


### **Geochemical Survey**


The geochemical surveys consist of rock, soil, silt and bulk silt sampling. B-horizon soil and talus fines samples were collected on grids established by compass and hip-chain.

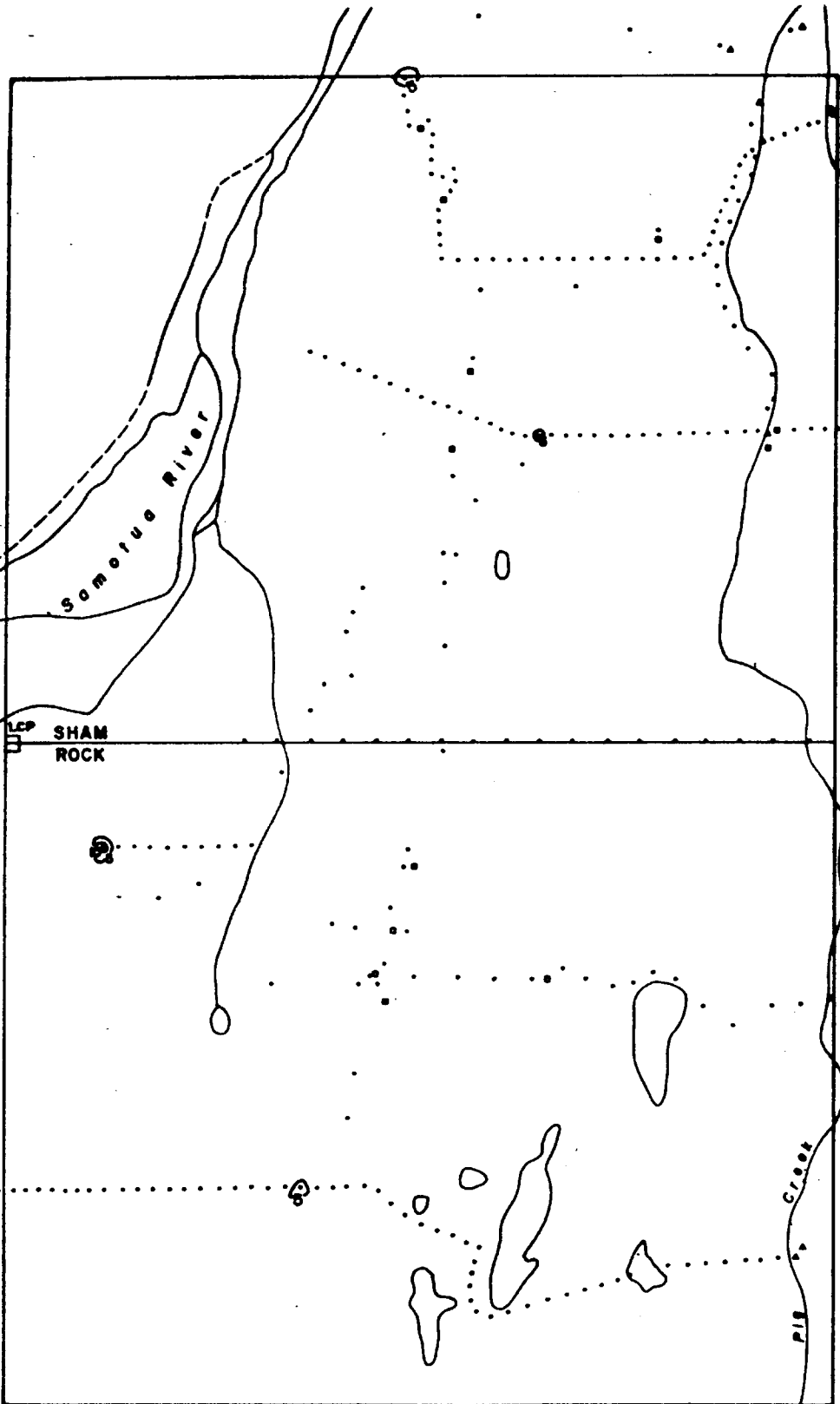


**LEGEND**



- SOIL SAMPLE LOC.
- △ SILT
- ▣ ROCK

 > 50 ppb Au

 Chevron Canada Resources Limited Barrick Star		
<b>SHAM &amp; ROCK GOLD GEOCHEMISTRY</b>		
FIGURE No 5	PROJECT No	M 804
LATE MAN. ID#	REVISION	SCALE 1:20,000
DATE 104 R		
CHECKED BY EW		



**LEGEND**

- SOIL SAMPLE LOC.
- △ SILT " "
- ROCK " "
-  > 10 ppm Sb
-  > 5 ppm Sb



Chevron Canada Resources Limited Resource Dept	
<b>SHAM &amp; ROCK ANTIMONY GEOCHEMISTRY</b>	
FIGURE No. 6	PROJECT No. M 504
REVISED	SCALE 1:50000
DATE	FILE

The rock samples are typically grab samples weighing 1 - 2 kg. which represent the rock types in the outcrop.

Soil sampling was carried out on lines spaced approximately 500 meters apart with samples taken every 50 meters. This survey was designed to be a first pass across the claims to outline any broad anomalies that may require follow up. Samples sites in all cases are marked by pickets with metal tags attached.

All rock, soil and regular silt samples are analyzed for gold, silver, arsenic and antimony by Chemex Laboratories in North Vancouver. The soil samples were air dried in camp.

Geochemical analysis for gold and silver were done by fire assay fusion by atomic absorption spectrometry. Rock samples taken over measured width were assayed quantitatively by fire assaying.

The background values for the soil geochemistry are listed below:

	<u>Lowest Contour</u>	<u>Range of Average Background Values</u>
Gold	50 ppb	5 to 20 ppb
Silver	no contoured values	0.1 to 0.3 ppm
Arsenic	no contoured values	5 to 50 ppm
Antimony	5 ppm	0 to 2.5 ppm

The majority of samples below the lowest contour have values in the range of the average background values. There are a few samples which have values just below the lowest contour values.

## INTERPRETATION AND SUMMARY

The lack of any significant alteration and any large geochemical anomalies on the SHAM ROCK claims suggest there is little potential. However the only work that has been carried out is a first pass and therefore it is not exhaustive.

The presence of the rock type which host mineralization elsewhere in the district and two large structures indicates further work may discover buried mineralization.



## LIST OF REFERENCES

- Brown, D.; Walton, G. (1983). Geological, Geochemical Surveys SHAM ROCK Group, Assessment Report, 11p.
- Coney, P.J.; Jones, D.L.; Monger J.W.H.; Cordilleran Suspect Terranes, Nature, Vol. 288, pp 329-333.
- Souther, J.G. Volcanism and Tectonic Environments in the Canadian Cordilleran-a second look, Geol. Ass. of Canada Special Paper No. 16. 24p.
- Souther, J.G. (1971). Geology and mineral deposits of Tulsequah map area, British Columbia. Geological Survey of Canada Memoir 362, 84p.